

National Pipeline Mapping System

Integrity Management - New Foundations for Managing Pipeline Systems Integrity

Steve Fischer
GIS Manager
Office of Pipeline Safety
202-366-6267
steven.fischer@rspa.dot.gov
www.npms.rspa.dot.gov

Acronyms

- IMP -- Integrity Management Program
- HCA -- High Consequence Area
- HPA -- High Population Area
- OPA - Other Populated Area
- CNW - Commercially Navigable Waterway
- USA - Unusually Sensitive Area

National Pipeline Mapping System



[NPMS General](#) [Submissions](#) [Repositories](#) [Data](#) [Listserver](#) [Links](#) [Downloads](#)

DOT

[U.S. Department of Transportation](#)

RSPA

[Research and Special Programs Administration](#)

OPS

[Office of Pipeline Safety](#)



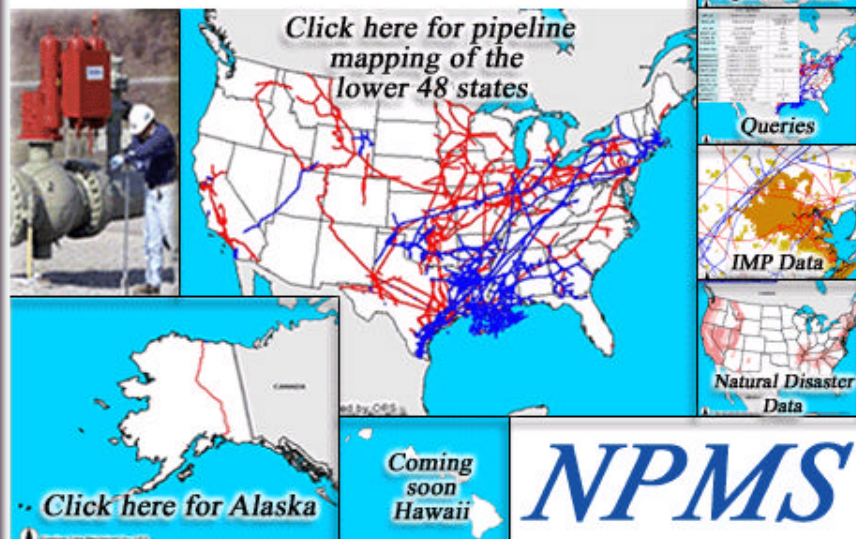
[OPS ID Search Tool](#)

[NPMS Metadata & Attribute Template Software v2.1.1](#)

This site best viewed with NS or IE 4.0+.
[Upgrade now.](#)

*Web Last Updated:
March 28, 2001*

Welcome to the...



[Pipeline Data](#)

[Queries](#)

[IMP Data](#)

[Natural Disaster Data](#)

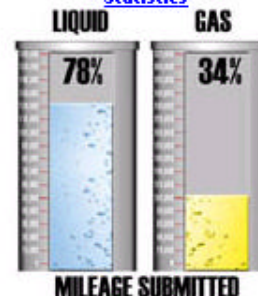
Click on me to learn about the NPMS



[DOT "Privacy and Disclaimer Notice"](#)

[DOT-RSPA-OPS "Special Concerns"](#)

[Click here for submission Statistics](#)



[Thanks to these operators for their recent submissions](#)



- 1) [USA Data Now available](#)
- 2) [New IMP \(Integrity Management Program\) Population Information](#)
- 3) [Addendum for Operator Standards](#)
- 4) [NPMS \(01/01\) data available!](#)
- 5) [Advisory Committee - NPMS Presentation - February 7, 2001](#)

NPMS Data Access

- Download data from the NPMS homepage -- www.npms.rspa.dot.gov
 - Pipeline Data
 - Hazardous Liquid - Integrity Management Program
 - High Consequence Data
 - HPA, OPA, CNW, USA - Drinking Water and Ecological
 - Ecological USA data available only to hazardous liquid pipeline operators
 - Commercially Navigable Waterways
 - Natural Hazard Data

National Pipeline Mapping System

[NPMS General](#)[Submissions](#)[Repositories](#)[Data](#)[Listserver](#)[Links](#)[Downloads](#)[Data
Dissemination](#)[DOT-OPS DATA](#)[Other Data](#)

DOT - OPS DATA

The pipeline and LNG layers of the NPMS are made available on this site to other government agencies, the pipeline industry, and the public. Other data layers pertaining to high consequence areas and natural disaster probability areas have been collected from various government and private sources and are also made available on this site.

One of the goals of the NPMS is to assist operators in progressing toward a fully digitized environment. Therefore, the digital pipeline and LNG facility data is provided back to contributing operators at no cost. Repositories may charge fees for other products and services.

The data contained in the NPMS are for reference purposes only and are not to be construed as survey-quality data or a replacement for contacting a one-call center.

Contact npms-nr@mbakercorp.com for more information.

Disclaimer 1: *The National Pipeline Mapping System data has been compiled by the United States Department of Transportation, Research and Special Programs Administration, Office of Pipeline Safety as part of the National Pipeline Mapping System (NPMS). The data is compiled from contributions made by pipeline and LNG facility operators and is processed by state agencies and private contractors. Neither the United States government nor any party involved in the creation and compilation of NPMS data and maps guarantees the accuracy or completeness of the product. NPMS data should be considered no more accurate than +/- 500 feet and must never be used as a substitute for contacting the appropriate one-call center prior to digging.*

Disclaimer 2: *The following data sets representing High Population Areas, Other Populated Areas, and Commercially Navigable Waterways are derived from the Pipeline Integrity Management in High Consequence Areas rulemaking [IMP Rulemaking]. The layers for High Population Areas and Other Populated Areas are based on 1990 Census data. The current population data (posted December 19th, 2000) has been improved to more accurately represent the geographic boundaries of the populated areas.*

National Pipeline Mapping System ****See Disclaimer 1****

****NPMS Data Represents the following OPS percentages****

Natural Gas = 99.48%

Disclaimer

The data used to create these USA maps meet criteria established by the Office of Pipeline Safety (OPS) for a limited purpose and are not appropriate for other uses. The ecological USA data are provided to assist pipeline operators in complying with OPS regulations pertaining to USAs. Due to data licensing limitations, users downloading these data are not authorized to use these data for other purposes. The information presented should not be considered a definitive statement on the presence, absence, or condition of ecological elements in a given area.¹ For use other than that mentioned above, please contact the appropriate resource agency that provided the ecological data to OPS.

The ecological Unusually Sensitive Areas presented here are based on several data sources, including data provided by the Network of Natural Heritage Programs (NHP). NHP data are delivered with the following disclaimers:

- a. The data provided are for planning, assessment, and informational purposes. Site-specific projects or activities should be reviewed for potential environmental impacts with appropriate regulatory agencies. If ground-disturbing activities are proposed on a site, the appropriate state natural heritage program(s) can be contacted for a site-specific review of the project area. For contact information, see the ABI web site, www.abi.org.
- b. Absence of information for a given geographic area, or lack of current information for a given area, does not categorically mean the absence of sensitive species or features. The absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks natural heritage resources.
- c. The quantity and quality of data are dependent on research and observation of many individuals and organizations. In most cases this information is not the result of comprehensive or site-specific field surveys; many natural areas have never been surveyed and new plant and animal species records are still being discovered for many localities. For these reasons, the Heritage Programs cannot provide a definitive statement on the presence, absence or condition of biological elements. The NHP data show the natural heritage occurrences documented at the time the data were provided. These data should not be used as a substitute if an on-site survey is required for environmental assessment.
- d. OPS acknowledges that data is time-limited. New and updated information is continually being added to the NHP databases.
- e. Although every effort has been made to verify this information the Heritage programs make no guarantee with respect to the currency or accuracy of any data point provided, and accepts no responsibility for decisions made based on the information supplied.

Click [\(I Accept\)](#) to continue or [\(I do not Accept\)](#)

National Pipeline Mapping System

[NPMS General](#)[Submissions](#)[Repositories](#)[Data](#)[Listserver](#)[Links](#)[Downloads](#)[Data
Dissemination](#)[DOT-OPS DATA](#)[Other Data](#)

To request Ecological USA data, please provide the following information to Sam Hall at OPS:

Please Note:

Ecological USA data will be provided to pipeline operators ONLY.

Due to data security concerns, contractors/consultants will need to initiate requests for ecological USA data through pipeline operators. Thank you for your cooperation.

- * First Name
- * Last Name
- * Middle Initial
- * Title
- * [Pipeline Operator Name](#)
- * [OPS Operator ID](#)
- * Street Address
- * City
- * State
- * ZIP Code
- * Phone
- * Fax
- * Email
- * States Requested (Currently available: IL, KS, LA, MO, MT, NM, OK, TX, WY)
- * Reason for Request
- * Do you accept the conditions of the agreement as stated at:

www.npms.rspa.dot.gov/data/USA_data/USA_eco_disc.htm

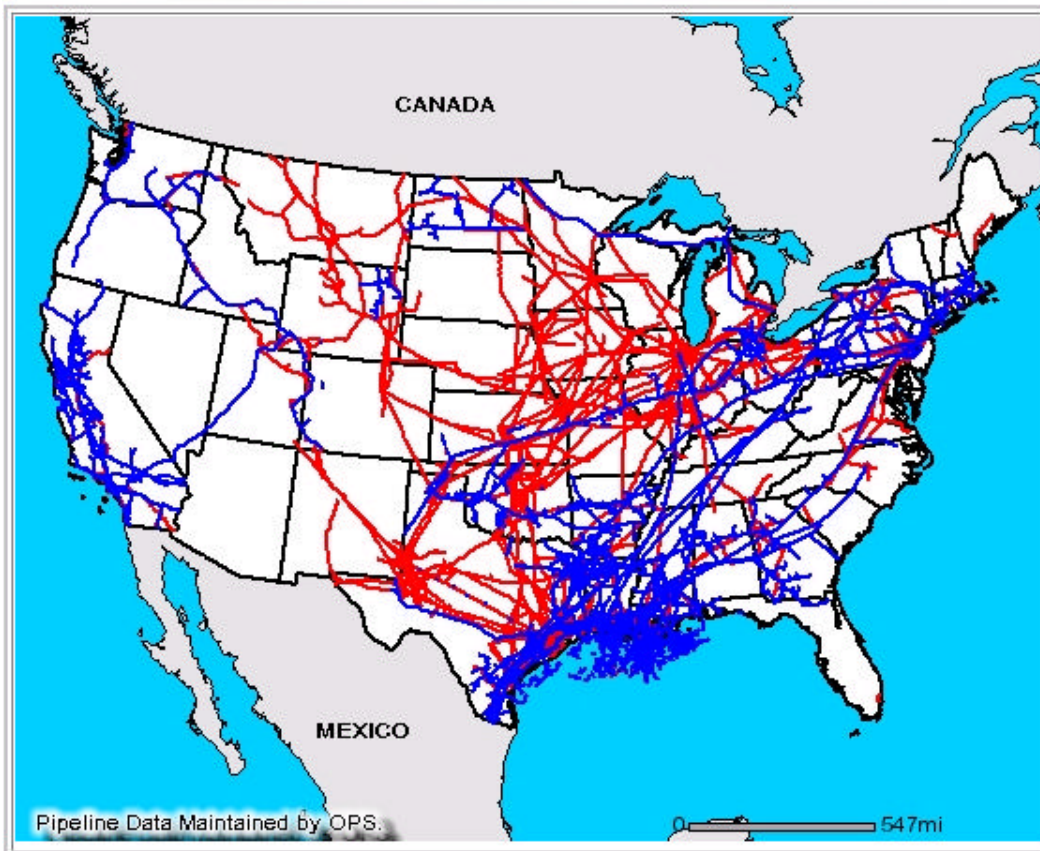
(Please state "I accept the terms of the data agreement" or "I do not accept the terms of the data agreement".)

Sam Hall
GIS Analyst
U.S. Department of Transportation
Office of Pipeline Safety
400 7th St. SW, DPS-11
Washington DC, 20590
Phone: 202-493-0591
Email: samuel.hall@rspa.dot.gov

NPMS Data Access

- NPMS Internet Mapping Application from the NPMS homepage -- www.npms.rspa.dot.gov
 - Pipeline Data
 - Hazardous Liquid - Integrity Management Program High Consequence Data
 - HPA, OPA, CNW, USA - Drinking Water and Ecological
 - Ecological USA data available only to hazardous liquid pipeline operators
 - Commercially Navigable Waterways
 - Natural Hazard Data

National Pipeline Mapping System



[Layer List](#) [Legend](#) [Meta Data](#) [Help](#)

NPMS Pipelines

(This application does NOT display all pipelines in the United States.)

Visible Active

☒ ☐ Natural Gas Transmission
☒ ☐ Hazardous Liquid
[Classify](#)

[Refresh Map](#)

IMP (Integrity Management Program)

High Consequence Areas

(Applies to Hazardous Liquid Pipelines Only)

☐ ☐ [Commercially Navigable Waterways](#)
☐ ☐ [High Population Areas](#)
☐ ☐ [Other Populated Areas](#)

Unusually Sensitive Areas (Use Ctrl key to select multiple states)

(Applies to Hazardous Liquid Pipelines Only)

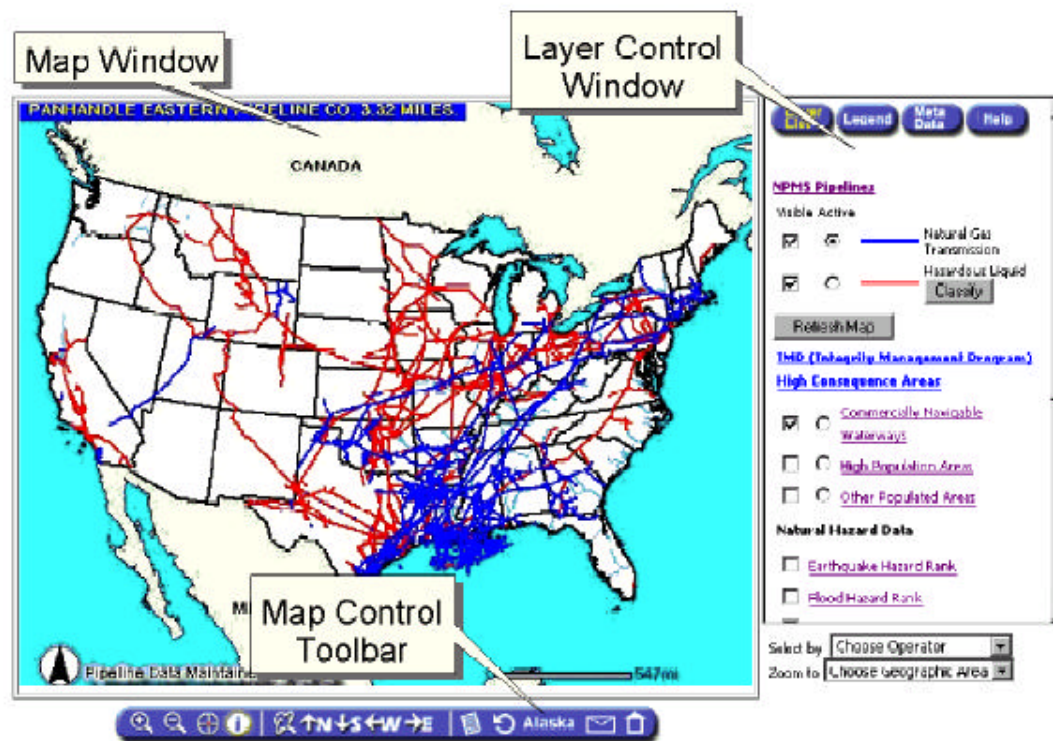
☐ ☐ CA [Drinking Water USAs](#)

Select by [Choose Operator](#)

Zoom to [Choose Geographic Area](#)

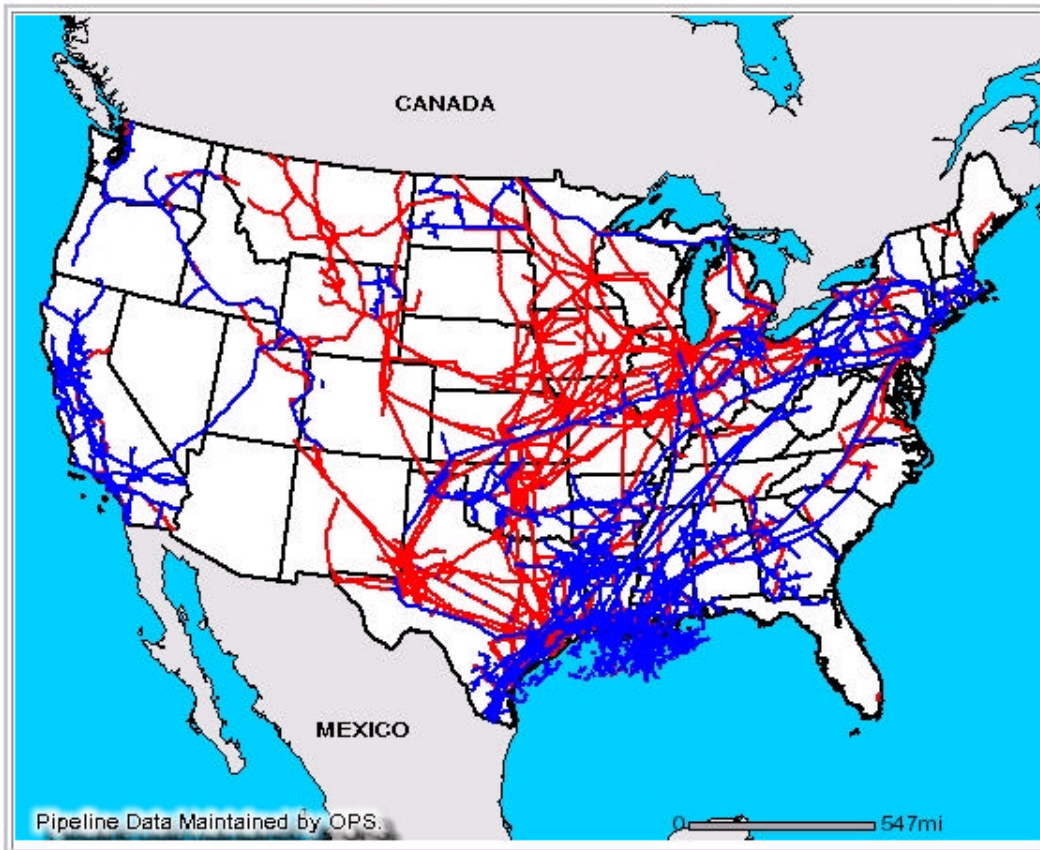
Using the National Pipeline Mapping System Internet Mapping Application

The National Pipeline Mapping System (NPMS) Internet Mapping Application homepage (shown below) consists of three main sections:



- **Map Window** – displays the chosen map layers and lets you graphically select features
- **Layer Control Window** – allows users to choose which layers are displayed and which layer's features are selectable in the map window

National Pipeline Mapping System



Layer List Legend Meta Data Help

NPMS Pipelines

(This application does NOT display all pipelines in the United States.)

Visible Active

- ☒ ☐ Natural Gas Transmission
- ☒ ☐ Hazardous Liquid
- Classify

Refresh Map

IMP (Integrity Management Program)

High Consequence Areas

(Applies to Hazardous Liquid Pipelines Only)

- ☐ ☐ Commercially Navigable Waterways
- ☐ ☐ High Population Areas
- ☐ ☐ Other Populated Areas

Unusually Sensitive Areas (Use Ctrl key to select multiple states)

(Applies to Hazardous Liquid Pipelines Only)

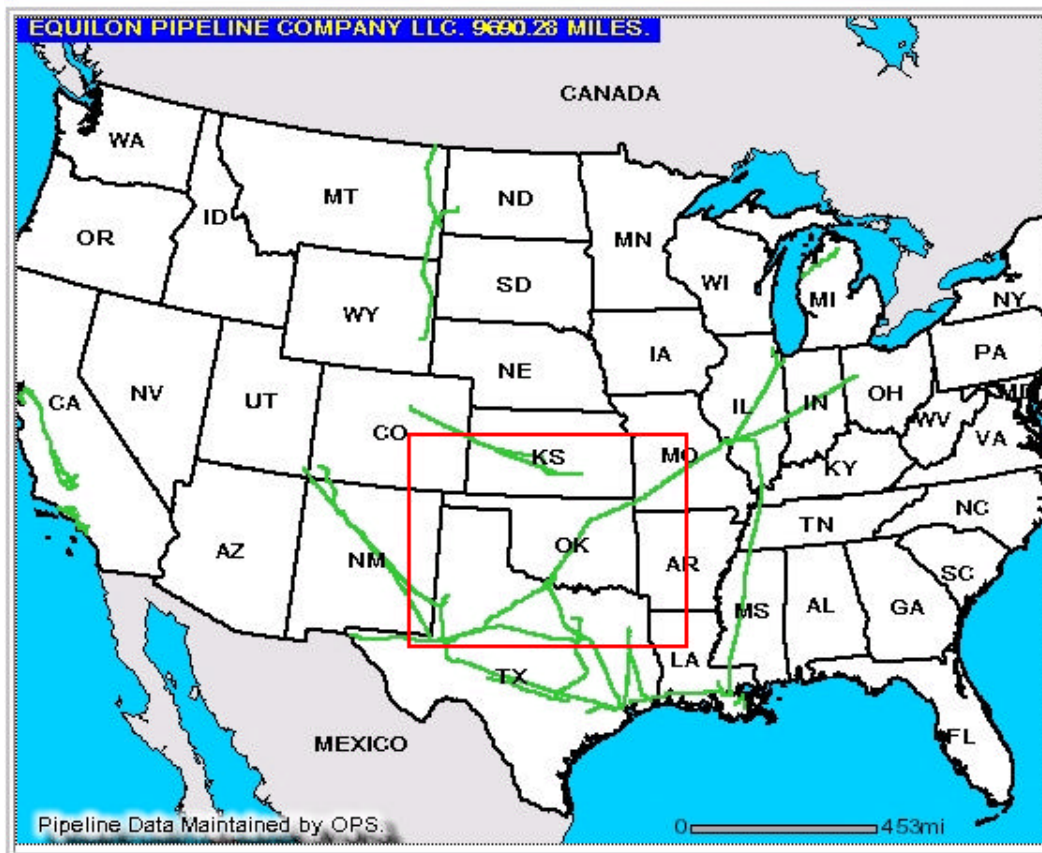
- ☐ ☐ CA Drinking Water USAs

Select by Liquid Pipeline Operator

Operator Name:

- Choose Operator
- EMERALD PIPE LINE CORP
 - ENBRIDGE PIPELINES (TOLED)
 - EQUILON PIPELINE COMPANY
 - EVERGLADES PIPE LINE CO L
 - EXPRESS PIPELINE LTD.
 - EXXON PIPELINE CO
 - KANAB PIPELINE CO
 - KINDER MORGAN MID-CONTINE
 - KINDER MORGAN SFPP L.P.
 - KOCH PIPELINE COMPANY, L.
 - KOCH REFINING CO

National Pipeline Mapping System



Visible Active

☐ ☐ — Natural Gas Transmission

☐ ☐ — Hazardous Liquid

IMP (Integrity Management Program) High Consequence Areas
(Applies to Hazardous Liquid Pipelines Only)

☐ ☐ [Commercially Navigable Waterways](#)

☐ ☐ [High Population Areas](#)

☐ ☐ [Other Populated Areas](#)

Unusually Sensitive Areas (Use Ctrl key to select multiple states)
(Applies to Hazardous Liquid Pipelines Only)

☐ ☐ Drinking Water USAs (Select multiple states)

☐ ☐ Ecological USAs (Select multiple states)

Natural Hazard Data

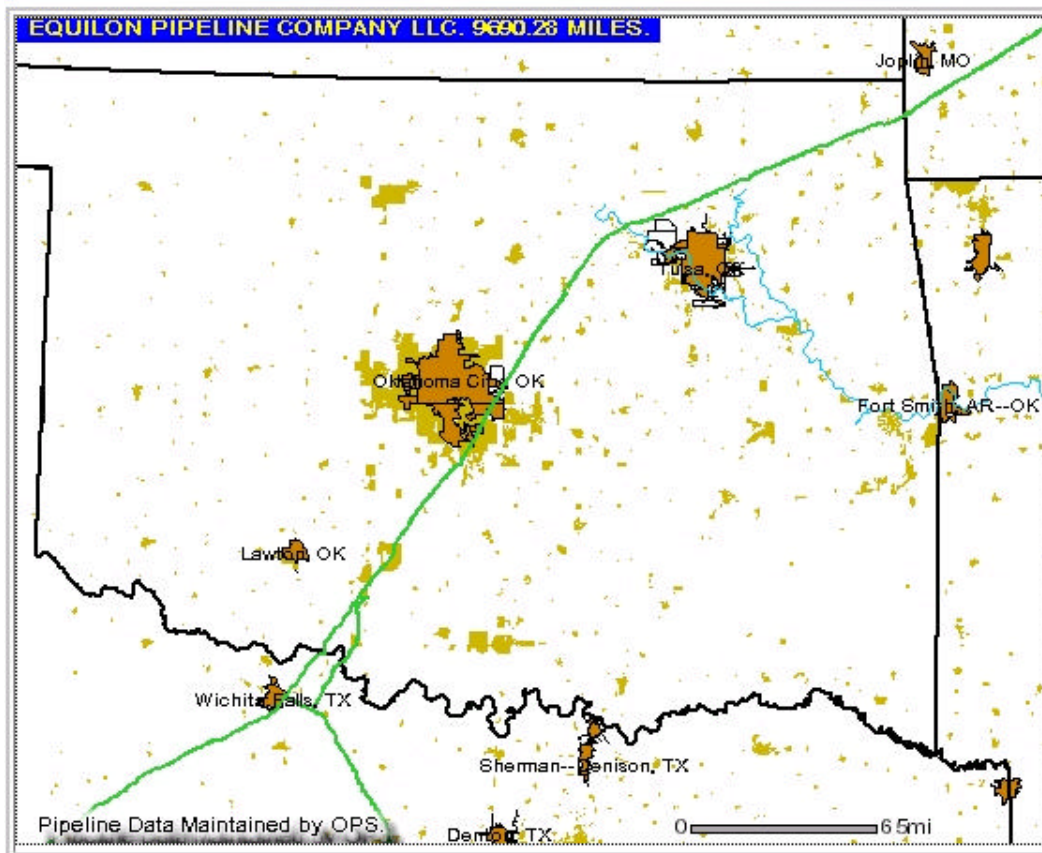
☐ [Earthquake Hazard Data](#)

Select by

Operator Name:

Zoom to

National Pipeline Mapping System



Refresh Map

IMP (Integrity Management Program) High Consequence Areas

(Applies to Hazardous Liquid Pipelines Only)

- ☒ ☐ [Commercially Navigable Waterways](#)
- ☒ ☐ [High Population Areas](#)
- ☒ ☐ [Other Populated Areas](#)

Unusually Sensitive Areas (Use Ctrl key to select multiple states)

(Applies to Hazardous Liquid Pipelines Only)

- ☐ ☐ Drinking Water USAs (Select multiple states)
- ☐ ☐ Ecological USAs (Select multiple states)

Natural Hazard Data

- ☐ [Earthquake Hazard Rank](#)
- ☐ [Flood Hazard Rank](#)
- ☐ [Hurricane Hazard Rank](#)
- ☐ [Landslide Hazard Rank](#)

Select by

Operator Name:

Zoom to

National Pipeline Mapping System



EQUILON PIPELINE COMPANY LLC. 136.11 MILES.

Pipeline Data Maintained by OPS.

Layer List
Legend
Meta Data
Help

NPMS Pipelines
(This application does NOT display all pipelines in the United States.)

Visible Active

☐ ☐ — Natural Gas Transmission
 ☒ ☒ — Hazardous Liquid

Classify

Refresh Map

http://209.118.98.195/lower48/attribute.asp?thevar=9...

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home

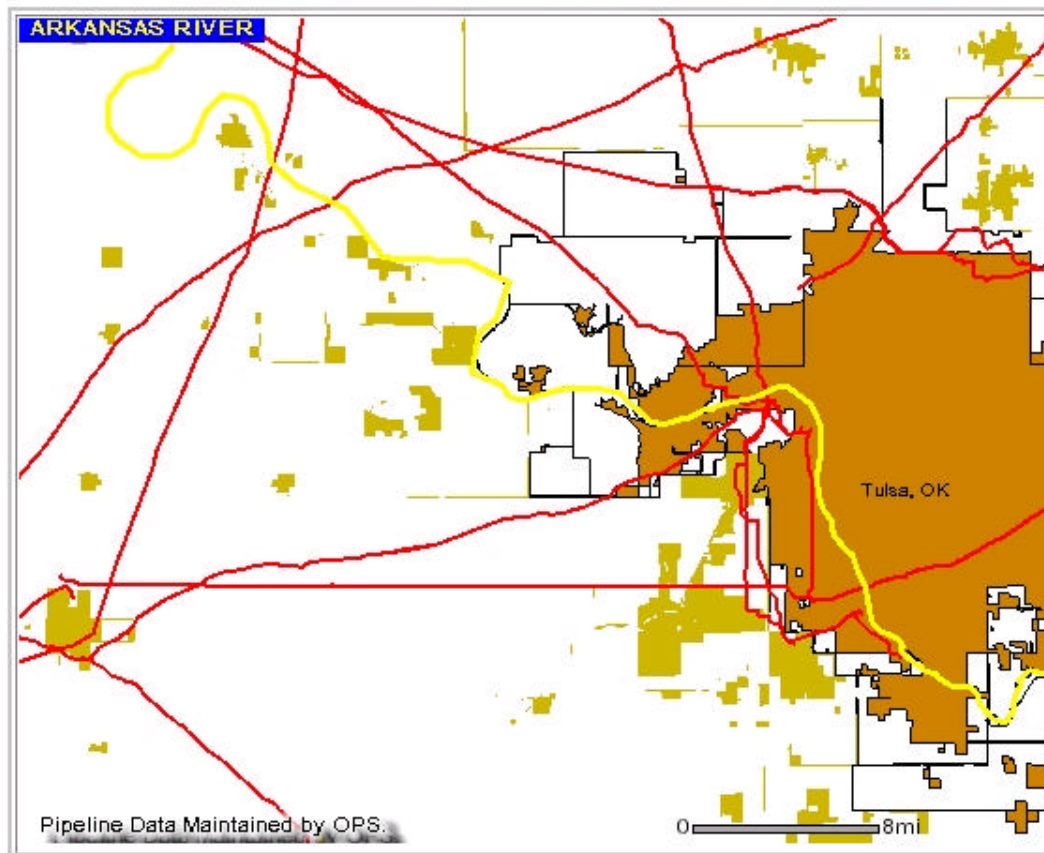
Radio Stop Radio Stations The Londo...

Hazardous Liquid Pipelines

OPS_ID	OPERATOR NUMBER	31174
OPER_NM	OPERATOR NAME	EQUILON PIPELINE COMPANY LLC
SYS_NM	SYSTEM NAME	OZARK
SUBSYS_NM	SUB SYSTEM NAME	CUSHING-WOOD RIVER
PLINE_ID	PIPELINE ID	79
DIAMETER	DIAMETER	22.00
ALBERS_MIL	MILEAGE CALCULATED FROM ALBERS PROJECTION	136.11
COMMODITY1	COMMODITY CATEGORY 1	CRUDE OIL
COMMODITY2	COMMODITY CATEGORY 2	
COMMODITY3	COMMODITY CATEGORY 3	
CMDTY_DESC	COMMODITY DESCRIPTION	CRUDE OIL
INTERSTATE	INTERSTATE DESIGNATION	YES
STATUS_CD	PIPELINE STATUS CODE	IN SERVICE
QUALITY_CD	DATA QUALITY CODE	EXCELLENT. POSITIONAL ACCURACY IS 0 TO 50 FEET
REVIS_CD	REVISION CODE	ADDITION TO THE NPMS
METADATA_I	METADATA ID	31174-0002
SUBREPOS_C	REPOSITORY CODE	NR



National Pipeline Mapping System



Transmission
Hazardous Liquid
Classify

Refresh Map

**IMP (Integrity Management Program)
High Consequence Areas**
(Applies to Hazardous Liquid Pipelines Only)

☒ ☐ [Commercially Navigable Waterways](#)

☒ ☐ [High Population Areas](#)

☒ ☐ [Other Populated Areas](#)

Unusually Sensitive Areas (Use Ctrl key to select multiple states)
(Applies to Hazardous Liquid Pipelines Only)

☐ ☐ OK TX Drinking Water USAs (Select multiple states)

☐ ☐ OK TX Ecological USAs (Select multiple states)

Natural Hazard Data

☐ ☐

Select
Operal
EQUI

Zoom

http://209.118.98.195/lower48/attribute.asp?thevar=9...

File Edit View Favorites Tools Help

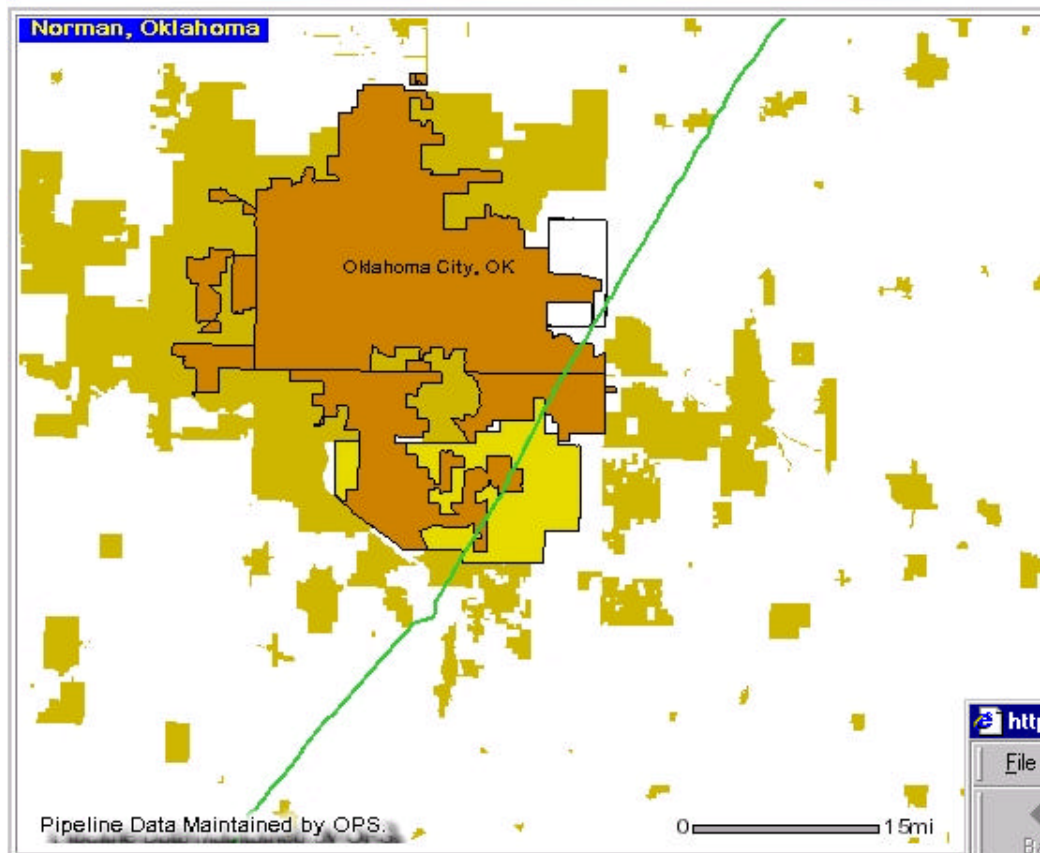
Back Forward Stop Refresh Home

Radio Stop Radio Stations The Londo...

Commercially Navigable Waterways

RIVERNAME	ARKANSAS RIVER
STATE	OK


National Pipeline Mapping System




[Layer List](#) [Legend](#) [Meta Data](#) [Help](#)

NPMS Pipelines
(This application does NOT display all pipelines in the United States.)

Visible Active

☐ ☐  Natural Gas Transmission

☐ ☐  Hazardous Liquid

[Classify](#)

[Refresh Map](#)

IMP (Integrity Management Program) High Consequence Areas
(Applies to Hazardous Liquid Pipelines Only)

☒ ☐ [Commercially Navigable Waterways](#)

☒ ☐ [High Population Areas](#)

☒ ☒ [Other Populated Areas](#)

Unusually Sensitive Areas (Use Ctrl key to select multiple states)
(Applies to Hazardous Liquid Pipelines Only)

http://209.118.98.195/lower48/attribute.asp?thevar=9...

File Edit View Favorites Tools Help

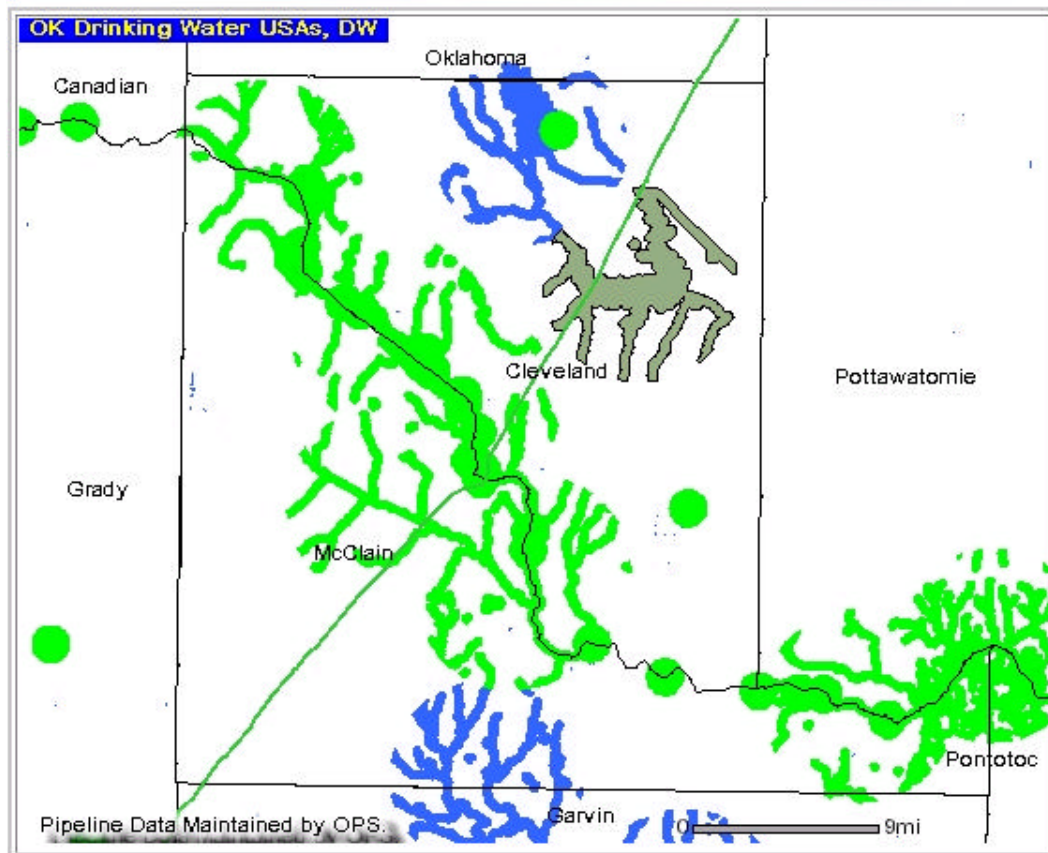
Back Forward Stop Refresh Home

Radio Stop Radio Stations The Londo...

Other Populated Areas

NAME	
STATE_NAME	Norman
CNTY_NAME	Oklahoma
	Cleveland

National Pipeline Mapping System



Unusually Sensitive Areas (Use Ctrl key to select multiple states)

(Applies to Hazardous Liquid Pipelines Only)

- ☒ ☐ CA IL Drinking Water USAs (Select multiple states)
- ☒ ☐ IL KS Ecological USAs (Select multiple states)

Natural Hazard Data

- ☐ [Earthquake Hazard Rank](#)
- ☐ [Flood Hazard Rank](#)
- ☐ [Hurricane Hazard Rank](#)
- ☐ [Landslide Hazard Rank](#)

Other Base Map Features

- ☒ County (scale dependent)
- ☐ Zip Code (scale dependent)

Label Features

- ☐ River Name (scale dependent)
- ☐ Urban Area Name (scale dependent)

http://209.118.98.195/lower48/attribute.asp?thevar=9...

File Edit View Favorites Tools Help

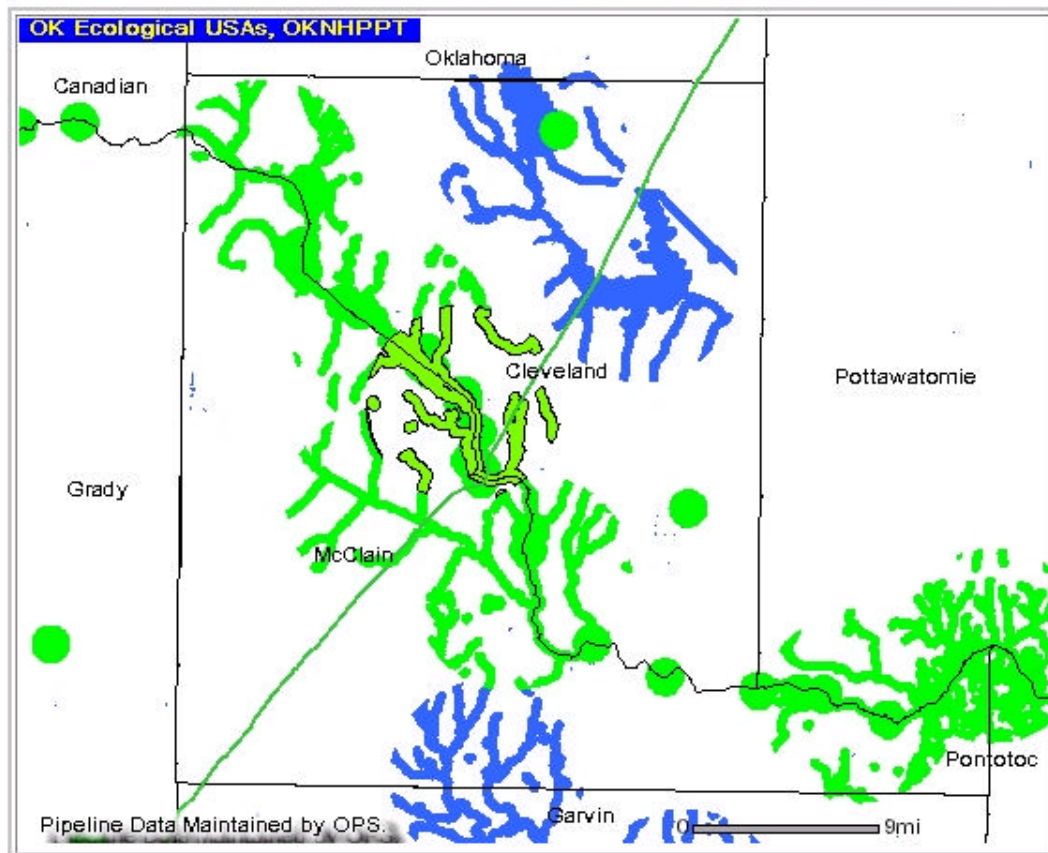
Back Forward Stop Refresh Home

Radio Stop Radio Stations The Londo...

Drinking Water USAs

TYPE	DW
NAME	
SOURCE	OKDEQ
ORGANIZATION	Oklahoma Department of Environmental Quality
URL	http://www.deq.state.ok.us/Water1/home/index.html

National Pipeline Mapping System



Unusually Sensitive Areas (Use Ctrl key to select multiple states)

(Applies to Hazardous Liquid Pipelines Only)

- ☒ ☐ CA ☐ IL Drinking Water USAs
(Select multiple states)
- ☒ ☐ IL ☐ KS Ecological USAs
(Select multiple states)

Natural Hazard Data

- ☐ [Earthquake Hazard Rank](#)
- ☐ [Flood Hazard Rank](#)
- ☐ [Hurricane Hazard Rank](#)
- ☐ [Landslide Hazard Rank](#)

Other Base Map Features

- ☒ County (scale dependent)
- ☐ Zip Code (scale dependent)

Label Features

- ☐ River Name (scale dependent)
- ☐ Urban Area Name (scale dependent)

Select <http://209.118.98.195/lower48/attribute.asp?thevar=9...>

Operational EQUI Zoom



Ecological USAs

TYPE	ECO
SOURCE	OKNHPPT
ORGANIZATION	Oklahoma Natural Heritage Inventory
URL	http://www.biosurvey.ou.edu/onhi.html